



**FRANCHISING THE PRIVATE SECTOR**  
To Get  
**CLEAN WATER**  
To the  
**BOTTOM OF THE PYRAMID**

**Hult Global Case  
Challenge**

London, UK  
5 March 2011

**Team ESADE**

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# AGENDA



**The Problem:** How we see it



**The Path:** Research & Key Findings



**The Opportunity:** Closing the Gap



**The Model:** Women and Franchising



**The Impact:** Scale, Quality and Sustainability



**The Next Steps**



*Appendix*





## The Problem: How We See It...

6 Hours  
Per Day

8100 km  
Per Year

1x Around  
The World

2 MILLION ADULT  
DEATHS

1.8 MILLION CHILD  
DEATHS



How do you provide **LIFE ALTERING**  
solutions for **CLEAN WATER**  
to **100,000,000**  
people?



# The Path: Research & Key Insights

Exhaustive Industry Report Research

Exhaustive Industry Report Research

In Depth Analysis of Internet

In Depth Analysis of Internet

IFC - Safe Water for All - Homeless - water to reach - BOB - USAID - 2000 - Report

Interviews of Experts in the Field and on the Ground

Group Charity: water Report: scalability: 37% growth; ADB Report on Phnom Penh Water supply:

not have to be free; Sustainable Sanitation & Water Management Report: Demand driven rather

Acumenfund.org Field and on the ground

World Water Development Report: Water, A Shared Responsibility used

Health Organization (WHO) - Regional Office for Europe - Urban Health; World Water Assessment

Programme; Cato Institute; WWAP Challenges - Water and Cities; Water.org; UN Human Settlements

Bangkok; Geoff Rayner; water SHL; Asia Water Aid; Technology; UN HABITAT; Water and sanitation;

Next Billion; United Nations Development Goals Report; WHO & UNICEF JMP 2010; Progress on

capitation and drinking water; UN Habitat Water for People; International Drinking Water Supply and Sanitation

Quito; Ecuador; Lidija Mavra - Social Enterprise Coalition - London; Julia Burnier - World Water

Development Report: Water for People Demand; Financial and Demand

Ethiopia; Roberto de Vane, CEO Citibank Brazil; Tracy James - Board of

Directors - Rotary International, Barcelona

QUALITY SUSTAINABILITY

QUALITY SUSTAINABILITY



# The Opportunity: Closing the Gap between Customers, Entrepreneurs and Financing

## BOP Entrepreneurs

- Exist within BOP
- Lack breadth of business knowledge
- Disconnected from financing



Solution for **SCALE**

## Fragmented Financing

- Funding for small uncoordinated projects
- Underserved Demand



**CUSTOMERS**

Demand **QUALITY**



**FINANCING**

Financial and Demand **SUSTAINABILITY**

## Market Exists

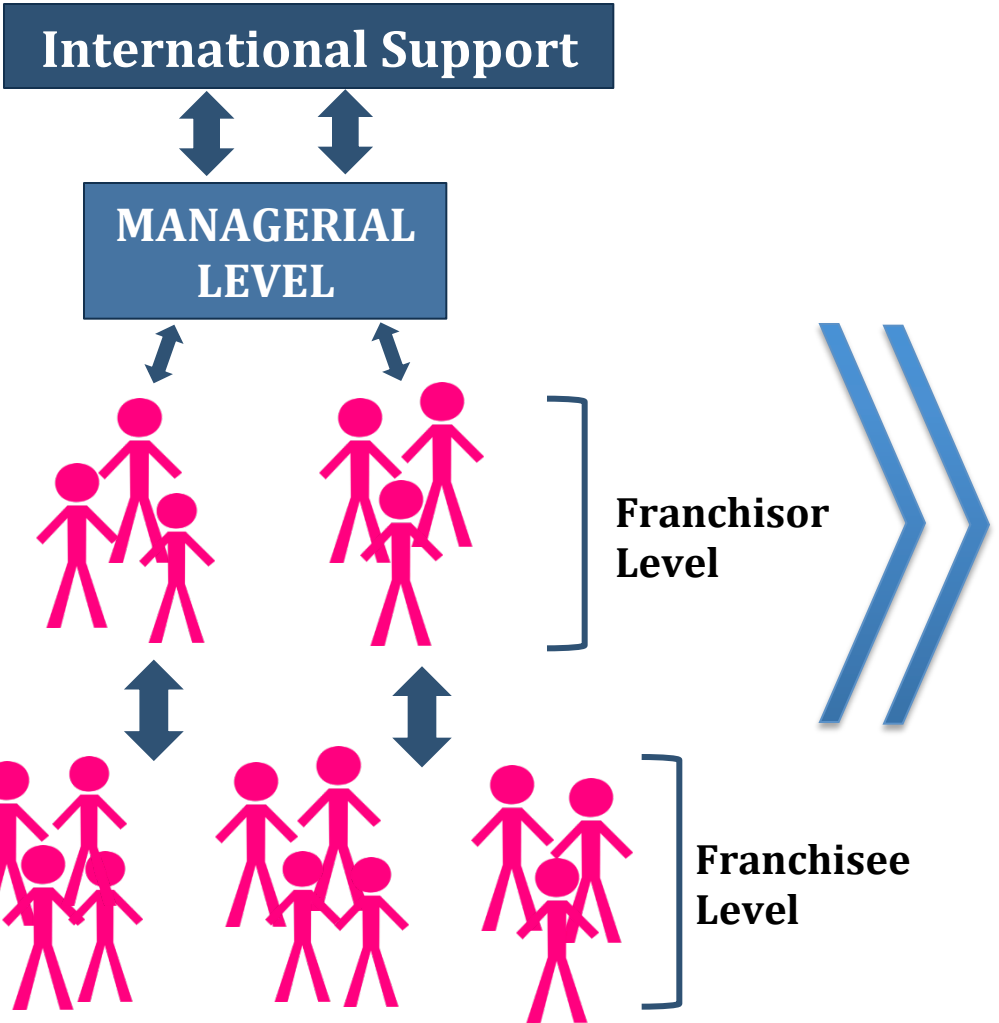
- Black Market
- Unhealthy Water

Sources: Interview Tom Outlaw (IFC), Interview Jordi Sanchez (UN Habitat), IFC Water for All

**Through Franchising we create an End to End solution that turns Water into a Business.**



# The Model: Franchise Model Uses Local Women Entrepreneurs



## Key Advantages

- ✓ Participatory Planning
- ✓ Technologically Agnostic
- ✓ Replicable Model
- ✓ Enterprise 'Cloud' Sourcing

**Franchise Model empowers women to develop a water business that provides clean water to their community.**



# The Impact: How Far the Franchise Can Reach....

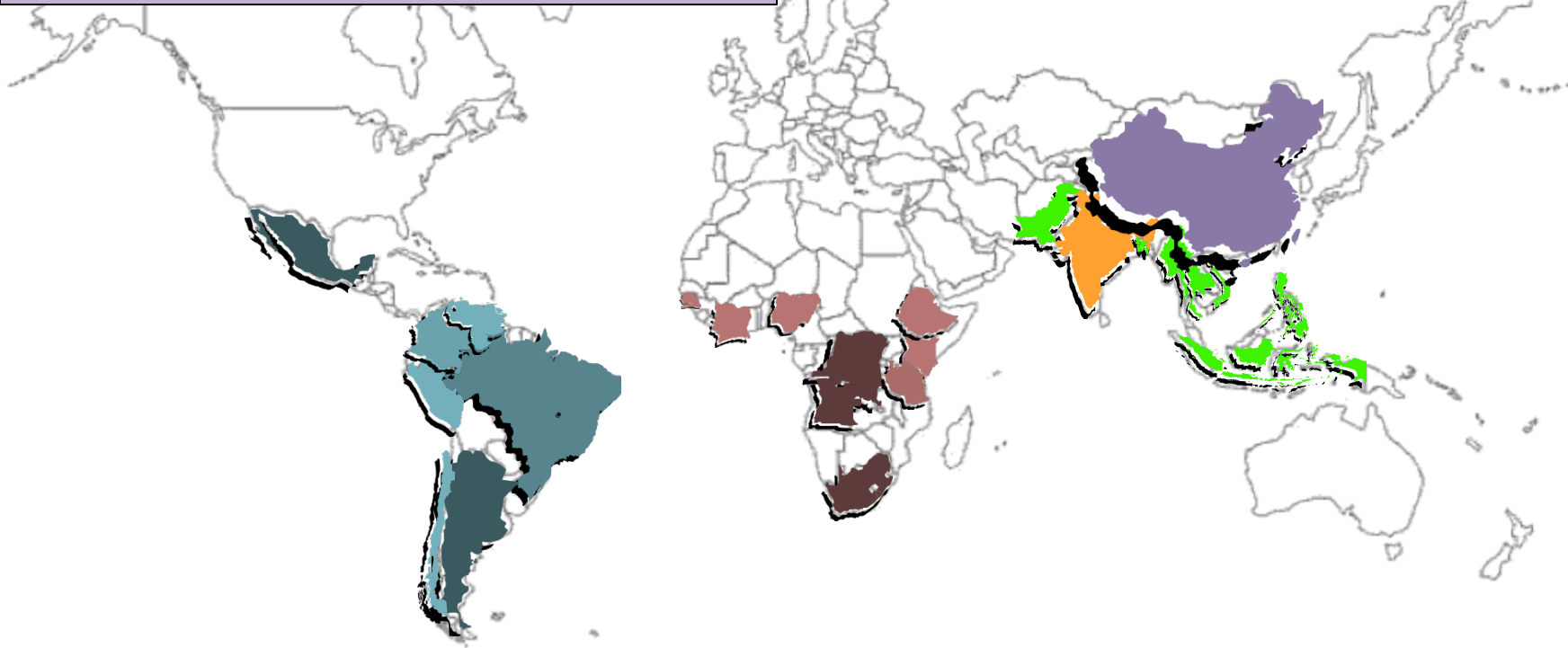
**Year 1: 21,739,094** people reached in **12** biggest cities in **India**

**Year 3: 22,764,548** people reached in **14** biggest cities in **Sub-Saharan Africa**

**Year 5: 25,161,336** people reached in **24** biggest cities in **China**

**Year 2: 17,787,157** people reached in **11** biggest cities in **S and SE Asia**

**Year 4: 19,576,715** people reached in **19** biggest cities in **Latin America**



**Total Impact: Reach 109,103,846 people in 80 cities in 5 years**





# The Impact: Build and Empower Consumer Demand for Quality

**CONSUMER DEMANDED QUALITY**

**EDUCATION and MARKETING** create a want versus a need.

**SMS Whistle Blowing** empowers and protects demand for quality

**CONSUMER** provides **Real Time Feedback** for reinvestment into products and processes

**COMPETITION and PROFIT OPPORTUNITY** encourage consistent higher quality water

**Franchises will compete on both Price and Quality to further benefit consumers.**

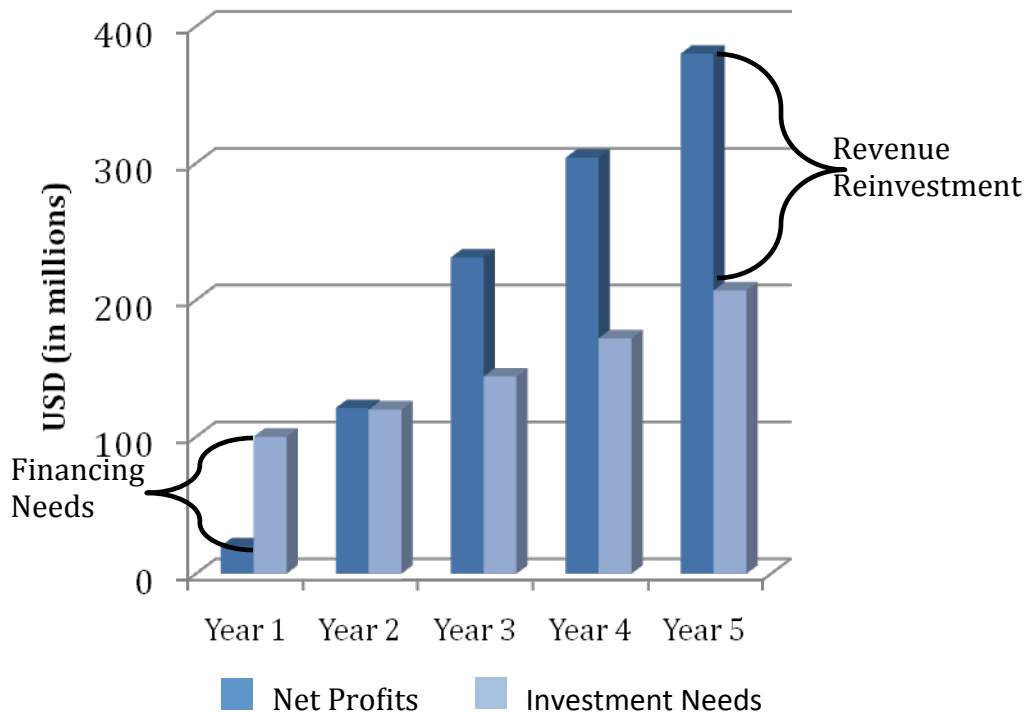


# The Impact: Financial and Social Sustainability

## FINANCIAL

## SOCIAL

### Estimated Financing Required and Returns



✓ Defined Local Ownership

✓ Brand Management

✓ NGO Partnerships

✓ Government Relationships

Sources: See Appendix – Estimated Financials

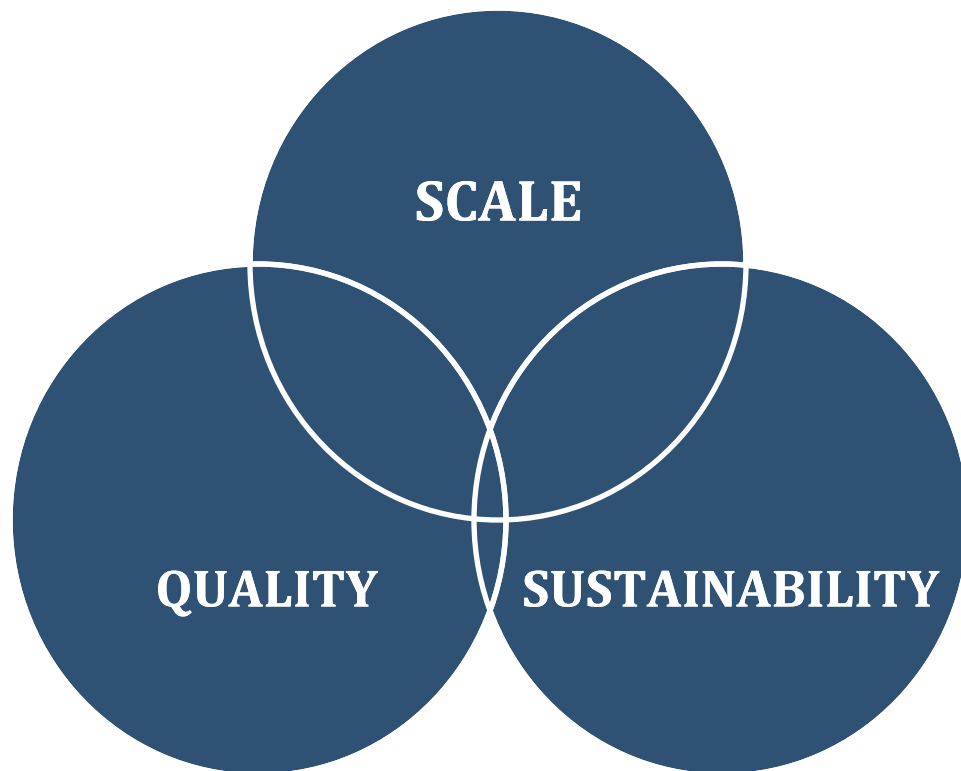
**Profitable revenue streams provide financial sustainability.**  
**Localized ownership and relationships provide social sustainability.**



# The Next Steps...

## STARTING TOMORROW

- 1 Integrate WaterCredit network to localize business plans and identify initial **entrepreneurs**
- 2 Finalize participatory business Plan and raise commercial **financing**
- 3 Marketing, Awareness and Education campaigns enhancing **consumer** demands



A young girl with dark hair is smiling broadly as she drinks water from a well. She is holding her hands under a stream of water that is falling from a metal spout. The well is made of concrete blocks and has some green paint on it. In the background, there is a blue sign with white text in a non-Latin script. The overall scene is bright and sunny.

**THANK YOU. QUESTIONS PLEASE.**

**"There's no people like the local people to understand the business."**

*ESADE Interview with Roberto do Valle, CEO Citibank Brazil*



# TEAM ESADE

**CAROLINE MARTINEZ**

**ESADE Net Impact Club**

**Government Policy and Partnerships**  
Experience in **New York**

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President

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# APPENDIX



# APPENDIX – ESTIMATED FINANCIALS

Water.org P&L	Year 1	Year 2	Year 3	Year 4	Year 5	Explanation
Revenue (Franchise Fees)	30.0	90.0	150.0	210.0	270.0	Average franchisee volume, fee of USD12.50 per week
Personnel Costs	(4.8)	(5.4)	(6.3)	(7.8)	(9.5)	3 person teams for each target city + management
Marketing Costs	(3.2)	(9.5)	(15.8)	(22.0)	(28.3)	10.5% of revenues benchmarked against Coca-Cola
Other Costs	(2.0)	(2.4)	(2.9)	(3.5)	(4.1)	
<b>Operating Income</b>	<b>20.0</b>	<b>73.0</b>	<b>125.0</b>	<b>177.0</b>	<b>228.0</b>	
Loans to Entrepreneurs	(100.0)	(120.0)	(144.0)	(172.0)	(207.0)	Assuming franchisee set-up at USD2500 with 20% increasing costs
Loan Repayment	0.0	48.0	105.6	126.7	152.1	24 month payback period with 20% interest and 80% payback rate
<b>Net Income</b>	<b>(80.0)</b>	<b>0.8</b>	<b>86.7</b>	<b>130.7</b>	<b>172.8</b>	
Reserves	(2.0)	(7.3)	(12.5)	(17.7)	(22.8)	10% of Operating Income set aside as reserves
<b>Financing Available (Need)</b>	<b>(82.0)</b>	<b>(6.5)</b>	<b>74.2</b>	<b>113.0</b>	<b>150.0</b>	

Franchisee P&L		Explanation
Revenue		7500
COGS	Purification	(1875)
	Distribution (Optional)	(500)
	Other Operating Costs	(300)
Franchisor Fees		(100)
Water.org Fee		(650)
<b>Operating Income</b>		<b>4075</b>



# APPENDIX – ENTERPRISE ‘CLOUD’ SOURCING



get involved donate

The Crisis Solutions Featured Projects Watercredit About Us Media Search

**Tackling the Water Crisis**

The water crisis is a huge problem, but solutions are simple, practical, and within reach.

Watch the Video...

Water.org is a U.S.-based nonprofit organization committed to providing safe drinking water and sanitation to people

**Location Specific Solution Model**



get involved donate

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Water.org is a U.S.-based nonprofit organization committed to providing safe drinking water and sanitation to people in developing countries. We envision a day when everyone can have safe water. How far will you go? [Donate now](#) make a difference

Select Your Parameters

<b>Region</b>	<b>Co</b>
<ul style="list-style-type: none"> <li>East Asia</li> <li>Latin America/Caribbean</li> <li>South Asia</li> <li>Sub-Saharan Africa</li> </ul>	<b>Chemical</b>
<b>Prevalen Diseases</b>	<b>Maximun</b>
<input type="text"/>	<input type="text"/>
<b>Existing agencies</b>	<b>Rain</b>
<input type="text"/>	<input type="text"/>



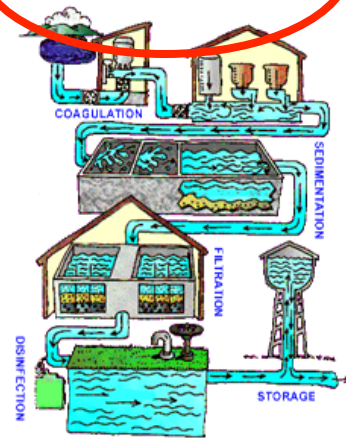
**Location Specific Parameter Selection**

Your Parameters

- Diarrhoea: Process needs to have pathogen removal, slow sand filtration and/or chlorination
- Chemical inavailability: Rules out possibly chlorination. Also rules out rapid sand filters.
- Low ability to pay: Need for inexpensive options
- No other agency: Need for simple options
- Rainfall moderate: May need to have further source of water supply if flow is low.

Removal of turbidity is a priority in South Asia in the region of Kolkata. Coagulation, sedimentation, and filtration followed by disinfection may be suitable.

Your Technology Solution



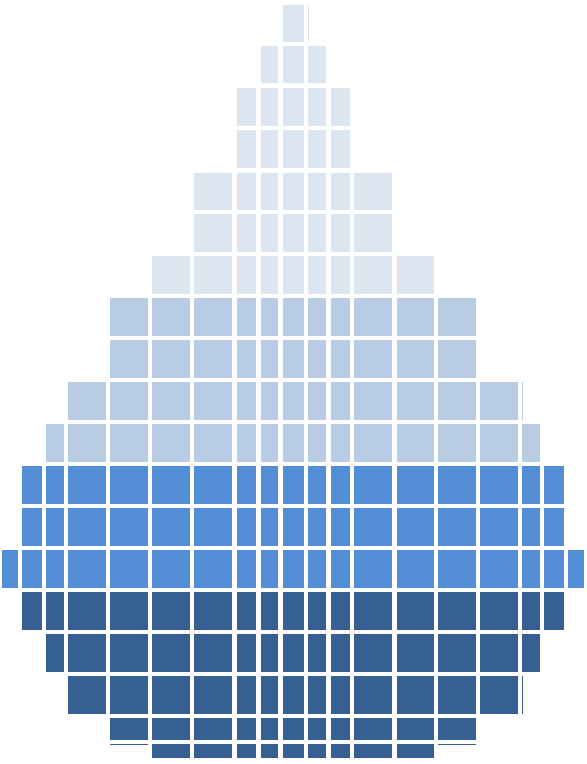




# APPENDIX – Market Sizing

## BOP Spending on Water

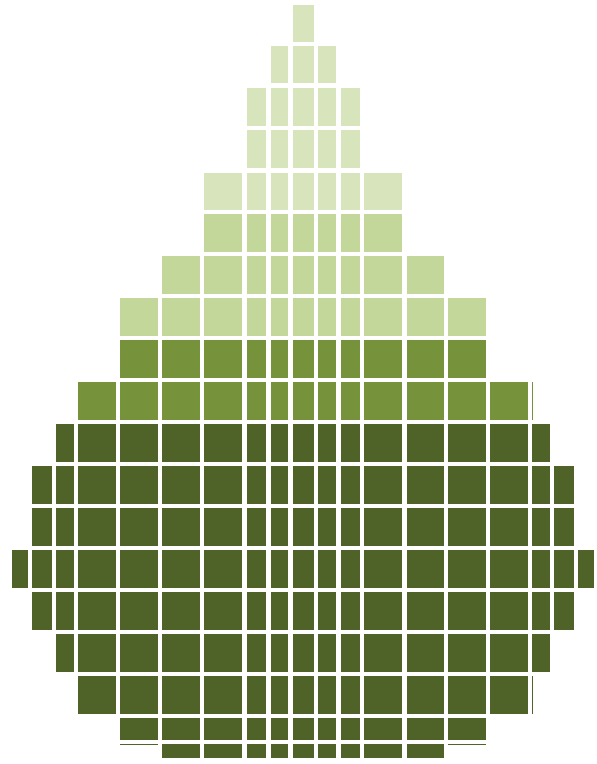
\$ 20.1 Billion



	\$ Billion (PPP)	
Eastern Europe	3.2	
Latin America	4.8	
Africa	5.7	
Asia	6.4	

## BOP Market Size

2.17 Billion



	Million	
Eastern Europe	254	
Latin America	262	
Africa	252	
Asia	1400	

\* Each square represents approximately 100 Million

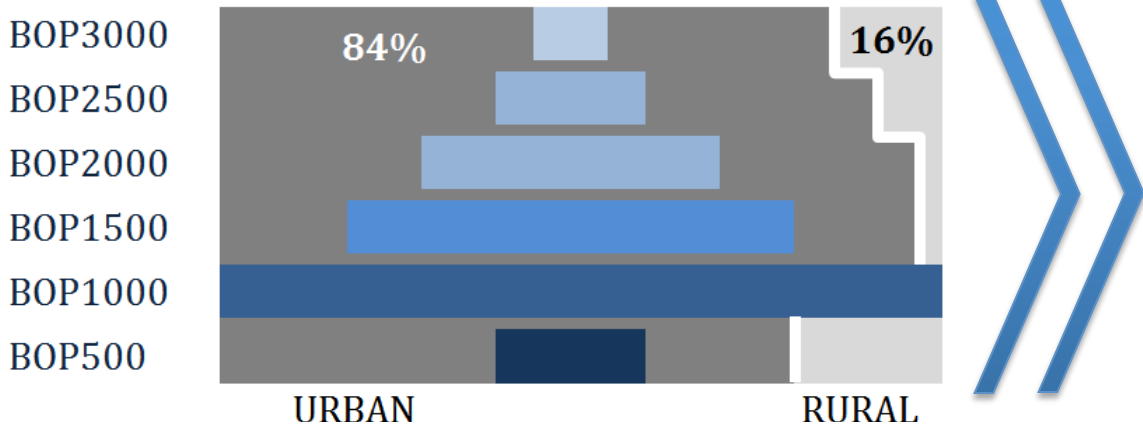
Sources: <http://rru.worldbank.org/Documents/Features/TheNext4Billion/Report/Chapter4.pdf>



# APPENDIX – Market Segmentation

## South Asia - Pakistan

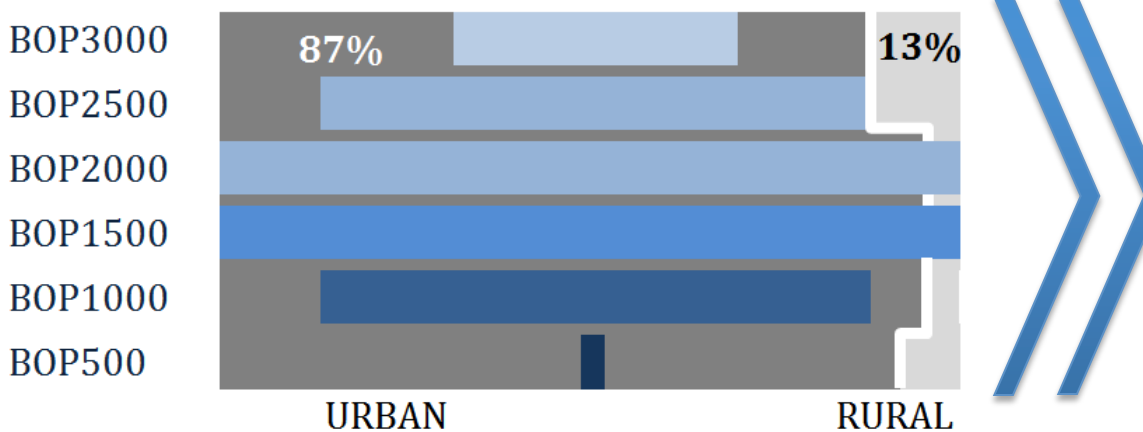
TOTAL WATER SPENDING BY INCOME SEGMENT



**Bottom Heavy**

## Latin America - Peru

TOTAL WATER SPENDING BY INCOME SEGMENT



**Mid - Top Heavy**

\*BOP3000: Income < \$3000 ( in 2002 international dollars adjusted to purchasing power parity

Sources: <http://rru.worldbank.org/Documents/Features/TheNext4Billion/Report/Chapter4.pdf>



# APPENDIX – SCALE OVERVIEW

## Regional Plan for Reaching 100,000,000 People in 5 years

	Region	Cities	Population Y1	Population Y2	Population Y3	Population Y4	Population Y5
Y1	India	12	<b>21,739,094</b>	21,956,484	22,176,049	22,397,810	22,621,788
Y2	South/ Southeast Asia	11	17,611,046	<b>17,787,157</b>	17,965,028	18,144,678	18,326,125
Y3	Sub-Saharan Africa	14	22,315,997	22,539,157	<b>22,764,548</b>	22,992,194	23,222,116
Y4	Latin American	19	19,000,966	19,190,976	19,382,886	<b>19,576,715</b>	19,772,482
Y5	China	24	24,179,549	24,421,345	24,665,558	24,912,214	<b>25,161,336</b>
	<b>Total</b>	<b>80</b>	<b>21,739,094</b>	<b>39,743,641</b>	<b>62,905,626</b>	<b>83,111,397</b>	<b>109,103,846</b>

Sources:

[http://www.geohive.com/earth/cy\\_aggmillion2.aspx](http://www.geohive.com/earth/cy_aggmillion2.aspx)

UN-Habitat Report, State of the World Cities 2010/2011: Bridging the Urban Divide



# APPENDIX – YEAR 1

## Year 1: 12 Cities in India

City	Country	Population in 2010	Slum Population in 2010	People Reached (60%)
Delhi	India	22,156,810	7,754,884	4,652,930
Mumbai (Bombay)	India	20,040,868	7,014,304	4,208,582
Kolkata (Calcutta)	India	15,552,080	5,443,228	3,265,937
Chennai (Madras)	India	7,546,954	2,641,434	1,584,860
Bangalore	India	7,217,570	2,526,150	1,515,690
Hyderabad	India	6,750,650	2,362,728	1,417,637
Ahmadabad	India	5,717,173	2,001,011	1,200,606
Pune (Poona)	India	5,001,785	1,750,625	1,050,375
Surat	India	4,167,553	1,458,644	875,186
Kanpur	India	3,364,165	1,177,458	706,474
Jaipur	India	3,130,928	1,095,825	657,495
Lucknow	India	2,872,957	1,005,535	603,321

Sources:

[http://www.geohive.com/earth/cy\\_aggmillion2.aspx](http://www.geohive.com/earth/cy_aggmillion2.aspx)

UN-Habitat Report, State of the World Cities 2010/2011: Bridging the Urban Divide



# APPENDIX - YEAR 2

## Year 2: 11 Cities in South and Southeast Asia

City	Country	Population in 2010	Slum Population in 2010	People Reached (60%)
Dhaka	Bangladesh	14,648,354	5,126,924	3,076,154
Karachi	Pakistan	13,124,793	4,593,678	2,756,207
Manila	Philippines	11,628,288	4,069,901	2,441,940
Jakarta	Indonesia	9,210,211	3,223,574	1,934,144
Lahore	Pakistan	7,131,864	2,496,152	1,497,691
Krung Thep (Bangkok)	Thailand	6,976,471	2,441,765	1,465,059
Thành Pho Ho Chí Minh	Viet Nam	6,167,090	2,158,482	1,295,089
Chittagong	Bangladesh	4,961,826	1,736,639	1,041,983
Yangon	Myanmar	4,349,604	1,522,361	913,417
Faisalabad	Pakistan	2,849,206	997,222	598,333
Hà Nội	Viet Nam	2,814,417	985,046	591,028

Sources:

[http://www.geohive.com/earth/cy\\_aggmillion2.aspx](http://www.geohive.com/earth/cy_aggmillion2.aspx)

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# APPENDIX - YEAR 3

## Year 3: 14 Cities in Sub-Saharan Africa

City	Country	Population in 2010	Slum Population in 2010	People Reached (60%)
Lagos	Nigeria	10,577,672	6,526,424	3,915,854
Kinshasa	Congo, DR of the	8,753,869	5,401,137	3,240,682
Luanda	Angola	4,772,334	2,944,530	1,766,718
Abidjan	Côte d'Ivoire	4,125,174	2,545,232	1,527,139
Johannesburg	South Africa	3,669,725	2,264,220	1,358,532
Nairobi	Kenya	3,523,349	2,173,906	1,304,344
Cape Town	South Africa	3,404,807	2,100,766	1,260,460
Kano	Nigeria	3,394,649	2,094,498	1,256,699
Dar es Salaam	Tanzania	3,349,134	2,066,416	1,239,849
Ekurhuleni (East Rand)	South Africa	3,201,805	1,975,514	1,185,308
Addis Ababa	Ethiopia	2,929,626	1,807,579	1,084,548
Durban	South Africa	2,879,233	1,776,487	1,065,892
Dakar	Senegal	2,862,879	1,766,396	1,059,838
Ibadan	Nigeria	2,836,665	1,750,222	1,050,133

Sources:

[http://www.geohive.com/earth/cy\\_aggmillion2.aspx](http://www.geohive.com/earth/cy_aggmillion2.aspx)

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# APPENDIX - YEAR 4

## Year 4: 19 Cities in Latin America

City	Country	Population in 2010	Slum Population in 2010	People Reached (60%)
São Paulo	Brazil	20,262,493	4,761,686	2,857,012
Ciudad de México	Mexico	19,460,212	4,573,150	2,743,890
Buenos Aires	Argentina	13,074,389	3,072,481	1,843,489
Rio de Janeiro	Brazil	11,949,619	2,808,160	1,684,896
Lima	Peru	8,940,555	2,101,030	1,260,618
Bogotá	Colombia	8,499,820	1,997,458	1,198,475
Santiago	Chile	5,951,554	1,398,615	839,169
Belo Horizonte	Brazil	5,852,358	1,375,304	825,182
Guadalajara	Mexico	4,402,412	1,034,567	620,740
Pôrto Alegre	Brazil	4,091,888	961,594	576,956
Salvador	Brazil	3,918,145	920,764	552,458
Brasília	Brazil	3,904,918	917,655	550,593
Monterrey	Mexico	3,895,876	915,531	549,318
Recife	Brazil	3,871,344	909,766	545,859
Fortaleza	Brazil	3,719,273	874,029	524,417
Medellín	Colombia	3,593,821	844,548	506,729
Curitiba	Brazil	3,461,742	813,509	488,105
Caracas	Venezuela	3,089,964	726,142	435,685
Campinas	Brazil	2,818,244	662,287	397,372

Sources:

[http://www.geohive.com/earth/cy\\_aggmillion2.aspx](http://www.geohive.com/earth/cy_aggmillion2.aspx)

UN-Habitat Report, State of the World Cities 2010/2011: Bridging the Urban Divide



# APPENDIX - YEAR 5

## Year 5: 24 Cities in China

City	Country	Population in 2010	Slum Population in 2010	People Reached (60%)
Shanghai	China	16,575,110	4,674,181	2,804,509
Beijing	China	12,385,263	3,492,644	2,095,586
Chongqing	China	9,401,170	2,651,130	1,590,678
Shenzhen	China	9,005,283	2,539,490	1,523,694
Guangzhou, Guangdong	China	8,883,865	2,505,250	1,503,150
Tianjin	China	7,884,473	2,223,421	1,334,053
Wuhan	China	7,681,099	2,166,070	1,299,642
Hong Kong	China, Hong Kong SAR	7,069,378	1,993,565	1,196,139
Dongguan, Guangdong	China	5,346,652	1,507,756	904,653
Shenyang	China	5,165,771	1,456,747	874,048
Foshan	China	4,969,498	1,401,398	840,839
Chengdu	China	4,960,893	1,398,972	839,383
Xi'an, Shaanxi	China	4,746,755	1,338,585	803,151
Nanjing, Jiangsu	China	4,518,826	1,274,309	764,585
Haerbin	China	4,251,063	1,198,800	719,279
Hangzhou	China	3,860,094	1,088,547	653,127
Changchun	China	3,596,748	1,014,283	608,569
Shantou	China	3,501,646	987,464	592,478
Qingdao	China	3,323,062	937,103	562,262
Dalian	China	3,305,864	932,253	559,352
Jinan, Shandong	China	3,237,414	912,950	547,770
Taiyuan, Shanxi	China	3,153,686	889,339	533,603
Kunming	China	3,115,793	878,653	527,192
Zhengzhou	China	2,965,730	836,335	501,801

Sources:

[http://www.geohive.com/earth/cy\\_aggmillion2.aspx](http://www.geohive.com/earth/cy_aggmillion2.aspx)

UN-Habitat Report, State of the World Cities 2010/2011: Bridging the Urban Divide